

257. (Amended) The isolated polypeptide of claim 240, wherein said epitope-bearing portion comprises amino residues Glu-670 to Ala-685 of SEQ ID NO: [56]2.

E9  
amt  
258. (Amended) The isolated polypeptide of claim 240, wherein said epitope-bearing portion comprises amino residues Ser-696 to Ala-705 of SEQ ID NO: [56]2.

259. (Amended) The isolated polypeptide of claim 240, wherein said epitope-bearing portion comprises amino residues Leu-782 to Ser-791 of SEQ ID NO: [56]2.

E10  
265. (Amended) The method of claim 17 wherein the polypeptide comprises amino acid residues 1 to 796 of SEQ ID NO:[56]2.

E11  
267. (Amended) The method of claim 17 wherein the polypeptide comprises an epitope-bearing portion of amino acid residues 1 to 796 of SEQ ID NO:[56]2.

#### Remarks

Claims 17-18 and 198-268 are allowed.

The title has been amended to more particularly identify the claimed invention.

The specification has been amended to: (a) delete text in the specification relating to the non-elected species and to cancel all sequence listings relating to the non-elected species; (b) recite sequence identifiers associated with the elected polynucleotides and polypeptides throughout the specification and the claims; (c) incorporate the Substitute Sequence Listing pursuant to 37 C.F.R. § 1.821 (c) and (d) renumber the pages of the claims accordingly. The above-mentioned amendments do not constitute new matter under 35 U.S.C. § 112.

Applicants submit that entry of the instant amendment does not raise new issues. Particularly, as disclosed in the specification, Applicant's invention is considered to be the sequence corresponding to an individual polynucleotide or fragment of the *Streptococcus Pneumoniae* genome (see, e.g., page 6, lines 16-19), as each polynucleotide fragment or ORF of the genome is separately patentable in its own right. This position is bolstered by the Patent Office's arguments in the record that the non-elected sequences are not related to the claimed invention, as demonstrated by the fact that the Patent Office has restricted and

withdrawn claims directed to non-elected sequences throughout the prosecution of the instant application.

Deletion of the reference to ATCC Deposit No. 209369 does not raise a new issue because the polynucleotide and polypeptide sequences disclosed in Table 1, as SEQ ID Nos: 1 and 2, were also available in the library deposited as ATCC Deposit No. 97755, or from DNA isolated from the same organism, such as the *S. pneumoniae* strain deposited with the ATCC as Deposit No. 55840. Both ATCC Deposit No. 97755 and ATCC Deposit No. 55840 are discussed in the instant specification at page 42, lines 1 to 4.

The sequences of the non-elected species are not required to support the elected claims under 35 U.S.C. §§ 101 and 112. Applicants point out that, as disclosed in the specification, a polynucleotide sequence corresponding to a single *Streptococcus pneumoniae* ORF can be used, for example, as a diagnostic probe to detect *Streptococcus pneumoniae* in a sample (see, e.g., page 46, lines 17-32). Applicants submit that on the priority date of the instant application, the skilled molecular biologist, enlightened by the teaching of the amended specification (i.e., the disclosure of the specification pending upon entry of the instant amendment) was more than capable of routinely generating the claimed polynucleotides and using the polynucleotides to express polypeptides, diagnose the presence of polynucleotides that hybridize to the claimed polynucleotides and to use the polypeptides of the invention to attenuate a *Streptococcus* infection. Further, amending the specification to delete text relating to the non-elected species and to cancel all sequence listings relating to the non-elected species, does not increase the scope of the claimed polynucleotides when compared to that prior to amending the specification.<sup>1</sup> Further, deletion of disclosure relating to the non-claimed sequences does not constitute new matter.

### Conclusion

Applicants respectfully request that the amendments and remarks of the present response be entered and made of record in the present application. Early notice to that effect

---

<sup>1</sup> Applicants additionally point out that the publication and/or release of Applicants' proprietary information concerning the non-elected subject matter is not commensurate with the rights which would ultimately be granted to Applicants for the elected species.

is earnestly solicited. If, in the opinion of the Examiner, a telephone conference would expedite prosecution, the undersigned can be reached at the telephone number indicated below. If a fee is required in connection with this paper, please charge Deposit Account No. 08-3425 for the appropriate amount.

Respectfully submitted,

Date: April 27, 2000



Michelle S. Marks (Reg. No. 41,971)  
Attorney for Applicants

**Human Genome Sciences, Inc.**  
9410 Key West Avenue  
Rockville, MD 20850  
(301) 610-5761 (phone)

MSM/CCB